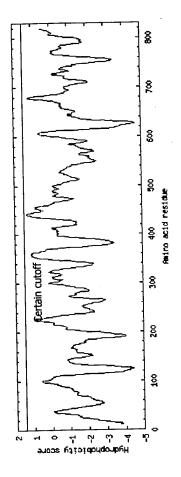
44	204 167	261 220			87 60	146	204	263		·
YELLEVLGRGAFGRY, T.	VKLIDVEEDIO LEYLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP - martihpdikPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP	LEYLDSWGIINNOOLINGERAANDERAMHLRKSLRQSPGSLKAVLKTMEE EALNF-SFSQKSDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTMEE EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP	KQIPDVETFRNLLPLMLQIDPSDRITIKDVVHITFL 297 PEWKISPEAKDLIKKLLVKDPEKRLTAEEALEHPFF 256	FIG. 1	YQVLYQLINPGALGVNLVVEEMETKVKHVIKQVECMDDHYASQALEELMPLLKLRHAHISV	YELGEKLGSGSFGRVIRGENGERENGENGENGENGENGENGENGOVLGQVLDALE YQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEKEAKKIALQIIRGLE		•		264 IPDVETFRNLLPLMLQIDPSDRITIKDVV-HITF 296 222 CSEELKDLIKKCLNKDPEKRPTAKEILNHPWF 253 FIG. 2
1 86	61 145	111 205 168	262		28	•				
Sbjct: Query:	Sbjct: Query:	Sbjct: Query: Sbjct:	Query:	, i	Ouery:	Sbj¢t:	Sbjct:	Query	Query Sbjct	Query: Sbjct:
	1 86	YELLEVLGKGAFGKVILLINGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 86 SVYQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLL	YELLEVLGKGAFGNYLLELLANGESSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 86 SVYQELFITWNGEISSLYLCLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 145 LEYLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 111 LEYLHSNGIIHRDLKPENIILIDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 111 LEYLHSNGIIHRDLKPENIILIDSTGGTVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 1205 EALNF-SFSQKSDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTWEE 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFFPP	1 YELLEVLGAGAGAFON TERMINICAL NELSEQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 1 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 1 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 1 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 1 62 LEYLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDFFRKSWMAP 1 63 LEYLHHLDIIHRNLKPSNIILIDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 1 64 LEYLHHLDIIHRNLKPSNIILIDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 1 65 LEYLHGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 1 66 SVYQELFTRNLLPLMLQIDPSDRITIKDVVHITFL 297 1 66 KQIPDVETFRNLLPLMLQIDPSDRITIKDVVHITFL 297 1 66 KQIPDVETFRNLLPLMLQIDPSDRITIKDVVHITFL 297 1 66 KQIPDVETFRNLLPLMLQIDPSGRITIRAEALEHPFF 256 1 66 KQIPDVETFRNLLPLMLQIDPSGRITIRAEALEHPFF 256 1 67 KQIPDVETFRNLLPLMLQIDPSGRITIRAEALEHPFF 256 1 68 KQIPDVETFRNLLPRAEALEHPFF 256 1 68 K	1 YELLEVLGAGAFGAYLELVMEF-NELSFQEVIEDKRKAKKIIDSEWMÖNVLGQVLDA 86 SVYQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMÖNVLGQVLDA 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 1145 LEYLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDFFRKSWMAP 111 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 112 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 113 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 1145 LEYLHGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 1168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPPP 117 LEYLHSNGIIHRDLKPENILLPELTGKPPFPGDDQLDALFKKIGKPPPPFPPP 118 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPPP 119 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPPPPPPPPPPPPPPPPPPPPPPPPPPP	1 YELLEVLGKGAFGALON TEACH 86 SUYQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRAKKIIDSEWMQNVLGQVLDA 61 VKLYDVFEDRDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 61 VKLYDVFEDRDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 111 LEYLHHLDIIHRNLKPSNIILLISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 112 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 113 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 1145 LEYLHGKGYGKAVDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTMEE 1205 EALNF-SFSQKSDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTMEE 168 EVLLGKGYGKAVDIWSLGVILYTELLTGKPPFPGDDQLDALFKKIGKPPPPFPPP 168 EVLLGKGYGKAVDIWSLGVILYTELLTGKPPFPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	1 YELLEVLGRGAFORVILLANDER-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 114 86 SVYQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDA 111 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKRRGRLSEDEARFYARQILSA 111 1145 LEYLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKNNIRAEEDPFRKSWMAP 20 115 LEYLHHLDIIHRNLKPENIILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 10 116 EVLLGKGYGKAVDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTMEE 2 117 LEYLHSNGIIHRDLKPENIILLDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTMEE 2 118 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 2 119 EALNF-SFSQKSDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 2 120 EALNF-SFSQKSDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 2 121 PEWKISPEAKDLIKKLLVKDPEKRLTAEEALEHPFF 256 PEWKISPEAKDLIKKLLVKDPEKRLTAEEALEHPFF 256 PEWKISPEAKDLIKKLLVKGPEKRLTAEEALEHPFF 256 PEWKISPEAKDGSGSFGKVYKGKHKNTGEIVAIKKLSKESIKEKKRFLREIRILRRLSHPNIVR YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKESIKEKKRFLREIRILRRLSHPNIVR YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKESIKEKKRFLREIRILRRLSHPNIVR YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKLSHFONTGEVEAKKIIDSSEWMQNVLGQVLDALE YOULTSEKEAKKIALDSEWARININGGLEFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSSEWMQNVLGQVLDALE	1 YELLEVLGKAAFGAV LELANDELSEVIEDKRKAKKIIDSEWMQNVLGGVLDA 14 8 SVYQELFITWNGEISSLYLCLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 11 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKKRGRLSEDEARFYARQILSA 11 145 LEYLHHIDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 2C 111 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 16 1205 EALNF-SFSQKSDIWSLGCIILDWTSCSFMDGTEAMHIRKSLRQSFGSLKAVLKTWEE 2' 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPP 2' 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPP	1 YELLEVLGKGAFGYLDA 144 86 SUYQELFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGGVLDA 114 61 VKLYDVFEDKDKLYLVMEYCEGGDLFDLLKRAGRLSEDEARFYARQILSA 11 145 LEYLHHLDIIHRNLKPENIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 111 LEYLHSNGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGFFEYMAP 16 1205 EALNF-SFSQKSDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSFGSLKAVLKTWEE 26 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDQLDALFKKIGKPPPPFPP 27 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDQLDALFKKIGKPPPPFPP 27 168 EVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDQLDALFKKIGKPPPPFPP 27 168 EVLLGKGYGKAVDIWSLGVILYKLLVKDPEKRLTABERLEHPFF 256 170 YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKLKKESIKEKKRFLREIRILRRLSHPNIVR 67 189 YQULYQLNPGALGVNLVVBEMBTTKVKHVIKQVECMDDHYASQALEEIMPLIKIRHAHISV 67 190 YGULFITWNGEISSLYLCLVMEF-NELSFQEVIEDKRAKKIIDSEWMQNVLGQVLDALE 17 190 YQULYQLNPGALGVNLVVBEWBTTKVKHVIKQVECMDDHYASQALEEIMPLIKIRHAHISV 67 190 YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKLKKESIKEKKRFILBRRLSHPNIVR 67 190 YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKLKKKSYKKIIDSEWMQNVLGQVLDALE 17 190 YLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKNIRAEEDPFRKSWMAP 17 190 YLHHLDIIHRNLKPSNIILISSDHCKLQDLSSNVLMTDKAKNIRAEEDPFRKSWMAP 17 191 YLHSBGIVHRDLKPENIILLDBNGTVKIADFGLARLLKSSYSKLTTFVGTPEYMAP 117 190 YLHSBGIVHRDLKPENIILLDBNGTVKIADFGLARLLKSSYSKLTTFVGTPEYMAP 117 190 YLHSBGIVHRDLKPENIILLDBNGTVKIADFGLARLLKSSYSKLTTFVGTPEYMAP 117 190 YLHSBGIVHRDLKPENIILLDBNGTVKIADFGLARLLKSSYSKLTTFVGTPEYMAP 117 190 YLHSBGIVHRDLKPENIILLDBNGTVKIADFGLARLLKSSYSKLTFFFYGTPE	1 YELLEVLGANGALON LILLANDER SELVICLYMEF-NELSFQEVIEDKRKAKKIIDSEWMONVLGGOVLDA 14 86 SVYQELFITWNGEISELYLCLYMEF-NELSFQEVIEDKRKAKKIIDSEWMONLGGOVLDA 11 LEYLHHUDIIHRNIKPSNIILISSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 111 LEYLHSNGIIHRDLKPENILLIDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMAP 16 112 LEYLHHUDIIHRNIKPSNIILISSDHCKLQDLSGGTLLTTFVGTPEYMAP 16 113 LEYLHSNGIIHRDLKPENILLIDSTGHVKLADFGLAKQLDSGGTLLTTFVGTPEPPFPP 22 1145 EVILGKGYGKAVDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTWEE 26 115 LEYLHSNGIIHRDLKPENILLIDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTWEE 26 116 EVILGKGYGKAVDIWSLGVILYELTAEFALEHPFF 256 117 YELGEKLGSGSFGKVYKGKHKNYGENTATKLKKESIKEKKRFTREIRILRRLSHPNIVR 64 118 YCQLLYLUNGGLSCSLYLCLVWEF-NELSFQEVIEDKRKAKKIIDSEWMQNVLGQVLDALE 14 119 YLHRDIIHRNIKPSNIILLSSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 110 YLHSRGIVHRDLKPSNIILLSSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 111 LIGVFEEDDHLYLVMEYWEGGDLFDYLRRNGLLLSSKEAKKIALQILRGLE 20 112 YLHSRGIVHRDLKPSNIILLSSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 115 THRGIVHRDLKPSNIILLSSDHCKLQDLSSNVLMTDKAKWNIRAEEDPFRKSWMAP 20 116 EALNPS-FSQKSDIWSLGGILLDMTSCSFWDGTEAMHLRKSLRQSPGSLKAVLKTMEEKQ 20 117 THRJIIHRNIKPSNIILLDBTTVKIADFGLARLLKSSYSKLTTFVGTPETWAP 20 118 TLGVFEETWAPP-FSQKSDIWSLGGILLDMTSCSFWDGTEAMHLRKSLRQSPGSLKAVLKTMEEKQ 20 119 TLGVFEELTGKPPFSGIDPLEELFRIIKRGLRLPFPN 20 110 YLHSGGYSSKVDVWSLGVVLYELLTGKPPPFSGIDPLEELFRIIKRGLRLPFPN 20 111 EVLEGREGASSKVDVWSLGVVLYELLTGKPPPFSGIDPLEELFRIIKRGLRLPFPN 20 111 EVLEGREGASSKVDVWSLGVVLYEL

	290 DVVHI 294 252 ELVER 256		Query: Sbjct:
251	MDGTEAMHLRKSLRQSPGSLKAVLKTMEEKQIPDVETFRNLLPLMLQIDPSDK1TLK	233	Query:
	TLGESP-YPGMSNEEVLEYLKKGYRLPQPP-NCPDEIYDLMLQCWAEDPEDRPSFS	198	Sbjct:
197	QDLSSNVLMTDKAKWNIRAEEDPFRKSWMAPEALNFS-FSQKSDIWSLGCIILDMTSCSF ADFGLSRDLYSDDYYKVKGGKLPIRWMAPESLKEGKFTSKSDVWSFGVLLWEIF	174 (Query: Sbjct:
173		114 S	Query:
143		86 I	Sbjct:
113	VECMDDHYASQALEELMPLLKLRHAHISVYQELFITWNGEISSLYLCLVMEFNEL-	59 V	Query:
85	VKTLKEDASEQQIEEFLREAKIMRKLDHPNIVKLLGVCTEBEPLMIVMEYMEGG	32 V	Sbjct:

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Sbjct: 114 LMALDYLHMNHILHRDVKCSNIFLTKGQDIRLGDFGLAKILTSDDLASSVVGT----PS 168
                                                                                                                                                                                                                                                                               Query: 201 WMAPEAL-NFSFSQKSDIWSLGCIILDMTSCSFMDGTEAMHLRKSLRQSPGSLKAVLKTM 259
                                                                                                                                                                                                                                                                                                                            Sbjct: 169 YMCPELLADIPYGSKSDIWSLGCCIYEMT--SLKPAFKAFDMQALINKINKSIVAPLPTK 226
                                                                                                                                                                                     Query: 142 LDALEYLHHLDIIHRNLKPSNIILISSDHCKLQDLS-SNVLMTDKAKWNIRAEEDPFRKS 200
                                                                                          AHISVYQELFITWNGEISSLYLCLVMEFNELSFQEVIEDKRKAKKI-IDSEWMQNVLGQV 141
                                                                                                                                       PFIVEYKDSWVE-----KGCYVCIIIGYCEGG--DMAEAIKKANGVHFPEEKLCKWLVQL 113
MEKYQVLYQLNPGALGVNLVVEEMETKVKHVIKQVEC--MDDHYASQALEELMPLLKLRH 82
                                             MEQYEVLEQIGKGSFGSALLVKHKHEKKKYVLKKIRLARQTDRSRRSAHQEKELISRIRN 60
                                                                                                                                                                                                                     + +L +D
                                                                                                                        ++ E +KA
                                                                                                                                                                                                                       +I. D
                                 K K+V+K++
                                                                                                                             Y+C+++ + E
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sbjct: 227 YSG-----AFRGLVKSMLRKNPELR 246
                                                                                                                                                                                                                                                                                                                                                                                       Query: 260 EEKQIPDVETFRNLLPLMLQIDPSDR 285
                                                                                                                                                                                                                                                                                                                    +M PE L + + KSDIWSLGC I +MT
                                                                                                                                                                                                                        L AL+YLH I+HR++K SNI L
                                   ME+Y+VL Q+ G+ G L+V+
                                                                                                                                                                 Sbjct: 61
                                                                                                                 Query: 83
                     Query: 25
                                                                      Sbjct: 1
```

FIG.



	eight	_	2	۰	6		9	9	2
	Peak Height	0.577	0.942	1.110	1.319	0.881	0.646	1.216	0.512
GES	Peak Type	Putative							
	Peak Range	100 - 101	223 - 228	351 - 365	435 - 447	451 - 458	604 - 608	676 - 682	820 - 820